

BellSouth Service Quality Measurement Plan (SQM)

**Harmonized Performance Metrics Proposal
(Switched and Special Access)**

Version 1.11

Issue Date: April 28, 2004

Introduction

The BellSouth Service Quality Measurement Plan (SQM) describes in detail the measurements produced to evaluate the quality of service delivered to BellSouth and its Affiliates, and to Non-Affiliates. The SQM was developed to respond to the requirements of the Communications Act of 1996 Section 251/272, which required BellSouth to provide non-discriminatory access to Non-Affiliates. The reports, produced by the SQM, provide regulators and BellSouth the information necessary to monitor compliance with non-discrimination requirements.

This document is intended for use by someone with knowledge of the telecommunications industry, information technologies and a functional knowledge of the subject areas covered by the BellSouth Performance Measurements and the reports that flow from them.

Contents

Section 1: Ordering

FOCT2: Firm Order Confirmation (FOC) Timeliness	2
---	---

Section 2: Provisioning

PIAM2: Percent Installation Appointments Met.....	4
NITR2: New Installation Trouble Report Rate	5
PIC2: Average PIC Change Interval	6

Section 3: Maintenance and Repair

CTRR2: Failure Rate/Trouble Report Rate.....	7
MAD2: Average Repair Interval.....	8

Section 4: Glossary

.....	10
-------	----

Section 1: Ordering

FOCT2: Firm Order Confirmation (FOC) Timeliness

Definition

Firm Order Confirmation (FOC) Timeliness measures the percentage of FOCs returned within the standard interval. The percentage of requests receiving a FOC or reject is also calculated. A parity comparison is made between the service received by the Non-Affiliate Aggregate (IXC/CLEC) and the BellSouth Aggregate.

Exclusions

- Service requests identified as "Projects"
- Service requests canceled by the originator
- Weekends and designated holidays of the service center
- Unsolicited FOCs
- Administrative or test service request

Business Rules

Counts are based on each instance of a FOC sent from BellSouth. If one or more supplemental requests are issued to correct or change a request, each corresponding FOC received during the reporting period is counted and measured. Days calculated are business days, Monday through Friday, excluding designated holidays. Activity starting on a weekend or holiday will reflect a start date of the next business day. Activity ending on a weekend or holiday will be calculated with an end date of the last previous business day. Requests received after 3 PM will be counted as a "zero" day interval if the FOC is sent by close of business on the next business day.

Calculation

Firm Order Confirmation (FOC) Interval = (a - b)

- a = Date and time FOC is returned
- b = Date and time valid service request is received

Percent within Standard Interval = (c / d) X 100

- c = Number of service requests confirmed within the designated interval
- d = Total number of service requests confirmed in the reporting period

Percent FOC Completeness = (d / e) X 100 – Diagnostic

- d = Total number of service requests for which a Firm Order Confirmation or Reject is sent
- e = Total number of service requests received and due during the report period

Report Structure

- Non-Affiliates Aggregate
- BellSouth Aggregate
 - BellSouth 272 Affiliate
 - BellSouth and Other Affiliates Aggregate
- Geographic Scope
 - Region
 - State
- Interval Distribution Categories
 - 0 - <=2 days
 - 0 - <=5 days

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation (Percent within Standard Interval) SQM Analog/Benchmark

- Special Access
 - DS0 (Percent within 2 business days) Parity with BellSouth Aggregate
 - DS1 (Percent within 2 business days) Parity with BellSouth Aggregate
 - DS3 [(Non Optical) Percent within 5 business days] Parity with BellSouth Aggregate
 - DS3 [(Optical OCn) Individual Case Basis (ICB)] Parity with BellSouth Aggregate
- Switched Access
 - FGD (percent within 2 business days) Parity with BellSouth Aggregate

FOCT2: Firm Order Confirmation (FOC) Timeliness

Section 2: Provisioning

PIAM2: Percent Installation Appointments Met

Definition

Percent Installation Appointments Met measures the percentage of installation commitments completed on/before the current committed due date. An analog comparison is made between the service received by the Non-Affiliate Aggregate (IXC/CLEC) and the BellSouth Aggregate.

Exclusions

- Orders issued and subsequently canceled
- Orders associated with internal or administrative activities
- Disconnect Orders
- Carrier caused or end user misses

Business Rules

This measurement is calculated by dividing the number of service orders completed during the reporting period, on or before the current committed due date, by the total number of orders committed to completion during the same reporting period. Only BellSouth missed appointment codes will be counted as a miss (numerator) for this measure. The first valid missed appointment code will be used to determine whether an order is considered missed.

Calculation

Percent Installation Appointments Met = (a / b) X 100

- a = Number of orders completed on or before the BellSouth committed due date during the reporting period
- b = Total number of orders committed to completion during the reporting period

Report Structure

% Installation Appointments Met

- Non-Affiliates Aggregate
- BellSouth Aggregate
 - BellSouth 272 Affiliate
 - BellSouth and Other Affiliates Aggregate
- Geographic Scope
 - Region
 - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation (Percent within Standard Interval) **SQM Analog/Benchmark**

- Special Access
 - DS0 Parity with BellSouth Aggregate
 - DS1 Parity with BellSouth Aggregate
 - DS3 (Non Optical) Parity with BellSouth Aggregate
 - DS3 (Optical OCn)..... Parity with BellSouth Aggregate
- Switched Access
 - FGD Parity with BellSouth Aggregate

NITR2: New Installation Trouble Report Rate

Definition

New Installation Trouble Report Rate measures the quality of the installation work by capturing the rate of trouble reports on new circuits within 5 calendar days of the installation. An analog comparison is made between the Non-Affiliate Aggregate (IXC/CLEC) and the BellSouth Aggregate.

Exclusions

- Trouble tickets canceled at the IXC/CLEC or member of BellSouth Aggregate request
- Customer Provided Equipment (CPE) or other customer caused troubles
- BellSouth troubles associated with administrative service
- Troubles outside of BellSouth's control

Business Rules

Only the first customer direct trouble report received within 5 days of a completed service order is counted in this measure. Only customer direct trouble reports that require physical repair work by BellSouth will be counted in this report. Reports are calculated by searching in the prior report period for completed service orders and the following 5 days after completion of the service order for a trouble report issue date.

BellSouth Completion Date is the date upon which BellSouth completes installation of the circuit, as noted on a completion advice to the IXC/CLEC or member of BellSouth Aggregate.

The calculation for the following 5 calendar days is based on the creation date of the trouble ticket.

Calculation

Trouble Report Rate within 5 Calendar Days of Installation = $(a / b) \times 100$

- a = Count of circuits with trouble reports within 5 calendar days of installation
- b = Total number of circuits installed in the report period

Report Structure

- Non-Affiliates Aggregate
- BellSouth Aggregate
 - BellSouth 272 Affiliate
 - BellSouth and Other Affiliates Aggregate
- Geographic Scope
 - State
 - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

SQM Analog/Benchmark

- Special Access
 - DS0 Parity with BellSouth Aggregate
 - DS1 Parity with BellSouth Aggregate
 - DS3 (Non Optical) Parity with BellSouth Aggregate
 - DS3 (Optical OCh)..... Parity with BellSouth Aggregate
- Switched Access
 - FGD Parity with BellSouth Aggregate

PIC2: Average PIC Change Interval

Definition

Average PIC Change Interval is defined as the average interval of time between the date/time the PIC change request is received and the date/time the PIC change is completed.

Exclusions

- None

Business Rules

PIC Change Interval is defined as the elapsed time between receipt of a valid PIC change request to completion of the PIC change in the BellSouth switch. A PIC Change Interval is calculated for each valid PIC change request. Intervals are averaged for computation of the Average PIC Change Interval measurement.

Note: Records rejected from the Ordering or CARE process do not reach BellSouth data and therefore cannot be considered excluded.

Calculation

PIC Change Interval = (a - b)

- a = Date and Time PIC change request is completed in the BellSouth switch
- b = Date and Time valid PIC change request is received

Average PIC Change Interval = (c / d)

- c = Sum of PIC Change Intervals
- d = Number of PIC changes completed in reporting period

Note: Average PIC Interval Reported in hours

Report Structure

- Non-Affiliates Aggregate
- BellSouth 272 Affiliate
- Geographic Scope
 - Region

SQM Disaggregation – Analog/Benchmark

SQM Level of Disaggregation

SQM Analog/Benchmark

- Non-Affiliates Aggregate BellSouth 272 Affiliate

Section 3: Maintenance and Repair

CTRR2: Failure Rate/Trouble Report Rate

Definition

The percentage of initial and repeated circuit specific trouble reports completed per 100 in-service circuits for the reporting period. An analog comparison is made between the Non-Affiliate Aggregate (IXC/CLEC) and the BellSouth Aggregate.

Exclusions

- Trouble reports issued and subsequently canceled
- Employee initiated trouble reports
- Trouble reports/circuits associated with internal or administrative activities
- Customer Provided Equipment (CPE) or other customer caused troubles
- Reciprocal Services
- Tie Circuits
- Troubles outside BellSouth's control

Business Rules

Only customer direct trouble reports, which require physical repair work by BellSouth, will be counted in this report. The trouble report rate is computed by dividing the number of completed trouble reports handled during the reporting period by the total number of in-service circuits for the same period.

Calculation

Percent Trouble Report Rate = (a / b) X 100

- a = Number of completed circuit specific trouble reports received during the reporting period
- b = Total number of in-service circuits during the reporting period

Report Structure

- Non-Affiliates Aggregate
- BellSouth Aggregate
 - BellSouth 272 Affiliate
 - BellSouth and Other Affiliates Aggregate
- Geographic Scope
 - State
 - Region

SQM-Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

SQM Analog/Benchmark

- Special Access
 - DS0.....Parity with BellSouth Aggregate
 - DS1.....Parity with BellSouth Aggregate
 - DS3 (Non Optical).....Parity with BellSouth Aggregate
 - DS3 (Optical OCn).....Parity with BellSouth Aggregate
- Switched Access
 - FGD.....Parity with BellSouth Aggregate

MAD2: Average Repair Interval

Definition

The Average Repair Interval is the average duration of customer trouble reports, measured from the receipt of the customer trouble report to the time the trouble report is closed. The average outage duration is expressed in hours for completed circuit-specific trouble reports.

Exclusions

- Trouble reports issued and subsequently canceled
- Employee initiated trouble reports
- Trouble reports associated with internal or administrative activities
- Customer Provided Equipment (CPE) or other customer caused troubles
- Reciprocal Trunks
- Tie Circuits
- Troubles outside BellSouth's control

Business Rules

Only customer direct trouble reports, which require physical repair work by BellSouth, will be counted in this report. The average outage duration is calculated for each restored trouble report. The start time begins with the receipt of the trouble report and ends with the clearance of that report. Customer hold time or delay maintenance time resulting from verifiable situations of no access to the end user premise, other CLEC/IXC or BellSouth Aggregate caused delays, such as holding the ticket open for monitoring, is deducted from the total resolution interval.

Calculation

Repair Interval = (a – b)

- a = Date and time of trouble report closeout
- b = Date and time trouble report was received

Average Repair Interval = (c / d)

- c = Total of all repair intervals (in hours) for the reporting period
- d = Total number of trouble reports closed during the reporting period

Report Structure

Average Repair Interval

- Non-Affiliates Aggregate
- BellSouth Aggregate
 - BellSouth 272 Affiliate
 - BellSouth and Other Affiliates Aggregate
- Geographic Scope
 - State
 - Region

SQM-Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Special Access	
- DS0	Parity with BellSouth Aggregate
- DS1	Parity with BellSouth Aggregate
- DS3 (Non Optical)	Parity with BellSouth Aggregate
- DS3 (Optical OCn)	Parity with BellSouth Aggregate
• Switched Access	
- FGD	Parity with BellSouth Aggregate

MAD2: Average Repair Interval

GLOSSARY

Access Service Request (ASR)	A request to BellSouth to order new access service, or request a change to existing service, which provides access to the local exchange company's network under terms specified in the local exchange companies special or switched access tariffs
Appointment Codes	W: Company offered due date or the appointment requested by the customer is the same as the offered date L: Customer requested a later due date than the offered date X: The customer has requested an earlier date than the offered date and the company granted the request. This code will be used rarely since expedited requests must be approved
BellSouth 272 Affiliate	BellSouth Long Distance (BSLD) Services Group
BellSouth and Other Affiliates Aggregate	BellSouth Telecommunications and BellSouth affiliates other than BSLD
BellSouth Aggregate	BellSouth Telecommunications and all BellSouth affiliates
BellSouth Enterprises (BSE)	BellSouth CLEC that is part of BSLD Group
BellSouth Long Distance Group (BSLD)	BellSouth's long distance subsidiary
Business Days	Monday thru Friday excluding holidays
"C Order"	Order issued to make changes to an existing account
CDDD	Customer Desired Due Date
CPE	Customer Provided Equipment
Customer Not Ready (CNR)	A verifiable situation beyond the normal control of BellSouth that prevents Bellsouth from completing an order, including the following: CLEC or IXC Carrier is not ready; end user is not ready; connecting company or CPE (Customer Provided Equipment) supplier, is not ready
(SA)	No access to subscriber premises
(SR)	Customer Not Ready
(SL)	Customer Requests Later Date
(SO)	Customer Other
(SP)	Subscriber Prior: The customer requests an earlier due date than the original request
Facility Check	A pre-provisioning check performed by BellSouth, in response to an access service request, to determine the availability of facilities and assign the installation date
Firm Order Confirmation (FOC)	The notice returned from BellSouth, in response to an Access Service Request from a CLEC or IXC that confirms receipt of the request and that a service order has been created with an assigned due date

NTF	No trouble found
Unsolicited FOC	An Unsolicited FOC is a supplemental FOC issued by BellSouth to change the due date or for other reasons, although no change to the ASR was requested by the CLEC or IXC Carrier
PIC	Preferred Interstate Carrier
Project	Service requests that exceed the line size and/or level of complexity that would allow the use of standard ordering and provisioning processes
Query/Reject	BellSouth responses to an ASR requesting clarification or correction to one or more fields on the ASR before a FOC can be issued
Reciprocal Services	Services that BellSouth provides IXCs/CLECs as a transmission path back to our network
Repeat Trouble	Trouble that reoccurs on the same telephone number/circuit ID within 30 calendar days
Supplement ASR	A revised ASR that is sent to make a change in an original ASR request. A "Version" indicator related to the original ASR number tracks each Supplement ASR
TOK	Test OK

Symbols used in Calculations

-

A mathematical operator representing subtraction.

+

A mathematical operator representing addition.

/

A mathematical operator representing division.

<

A mathematical symbol that indicates the metric on the left of the symbol is less than the metric on the right.

<=

A mathematical symbol that indicates the metric on the left of the symbol is less than or equal to the metric on the right.

>

A mathematical symbol that indicates the metric on the left of the symbol is greater than the metric on the right.

>=

A mathematical symbol that indicates the metric on the left of the symbol is greater than or equal to the metric on the right.

()

Parentheses, used to group mathematical operations which are completed before operations outside the parentheses.